HARSHIT SOHANEY

harshit.sohaney@mail.utoronto.ca (437) 971-7300 Toronto, CA linkedin.com/in/harshitsohaney
harshitsohaney.github.io/Personal-Website/

EXPERIENCE

Application Developer Co-op | Softchoice Corp. May 2022 – August 2022

- Improved the frontend and backend for **Single Page Applications (SPA)** on the company portal using **.NET Core** to help users navigate items efficiently
- Optimized API logging tables with **Object Relational Mapping (ORM)** using **LINQ to SQL** queries to improve access time from 30 seconds to 2 seconds
- Implemented a planning interface by creating APIs to assist in determining development time and creating tasks

Project Lead | Google Solution Challenge Dec 2020 – May 2021

- Applied **SCRUM** management techniques to coordinate a team of 4 in prototyping a web-app hosting the lost & found system of Toronto
- Designed a real time **NoSQL** database using **Firestore** to keep store all reports received and tracked
- Integrated and constructed multiple parts of the application using **JavaScript** to bring together all components created by the team

PROJECT HIGHLIGHTS

GIS Mapping System | University of Toronto ECE297 Jan 2022 - May 2022

- Developed a mapping system using the OpenStreetMap database with **C++**. Iterated to improve movement speed by 98% to make the app user friendly
- Applied algorithms such as **Breadth First Search, Dijkstra**, and **A*** to optimize pathfinding and included various features to accompany the algorithms (directions, subways, search bar)
- Employed heuristic algorithms such as **2-opt** and **Simulated Annealing** with techniques like **multi-threading** to find an optimum solution to the Travelling Salesman Problem

Fake News Detection AI | Coursera May 2020

- Trained a **LSTM** network using Natural Language Processing (NLP) tools such as **tensorflow, nltk, pandas, keras**, that can detect false news on social media
- Gained an understanding of ML concepts such as **NLP, Feature Engineering** and **Recurrent Neural Networks** on a dataset of over 40,000 articles

Personal Website | Independent Project August 2022 - Present

- Designed a website using **HTML/CSS, Javascript** and **Bootstrap** with an interactive user interface inspired by the Spotify Desktop UI
- Implementing features such as a music player and an AI recommendation system using the Spotify API
- Self learning software design principles such as **Repository** and **Decorator** design patterns to improve workflow of the project

ACHIEVEMENTS

- **Second Place Prize** winner against 20 teams at ENACTUS UofT Innovation Pitch Competition for a social venture
- **School Medal** for scoring the highest score on the University of Waterloo Euclid Mathematics Exam within the school

EDUCATION

B.A.Sc. in Computer Engineering

University of Toronto

September 2020 – May 2024

Minor in Artificial Intelligence
Dean's List recipient - Winter 2020 - 2021, Fall 2021

Courses

Data Structures & Algorithms, Operating Systems, Intro to Deep Learning, Probability & Statistics, Linear Algebra

Clubs & Positions

ECE Ambassador, **UofTHacks** - Executive, **Digital Society** - Events Director, **Learn AI** - Curriculum Content Lead, **ECE Club** - Events Director, **UofT Aerospace Design Team** - Firmware & Optics, Performing Musician

TECHNICAL SKILLS

Programming

Software
C/C++ | Python | C# | Git | AngularJS | MATLAB

Web
JavaScript | AngularJS | HTML5/CSS3 | jQuery | React

Skills
Agile Development | SCRUM | Software Communication | Engineering Design

Machine Learning

PyTorch | Numpy | TensorFlow | NLTK | Matplotlib | Pandas

Software and Frameworks

MySQL | OOP | .NET Development | MVC Architecture | LINQ | GCP | STM32CUBE